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(54) **MICROFLUIDIC SYSTEM FOR AMPLIFYING AND DETECTING POLYNUCLEOTIDES IN PARALLEL**

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(57) **ABSTRACT**

The present technology provides for an apparatus for detecting polynucleotides in samples, particularly from biological samples. The technology more particularly relates to microfluidic systems that carry out PCR on nucleotides of interest within microfluidic channels, and detect those nucleotides. The apparatus includes a microfluidic cartridge that is configured to accept a plurality of samples, and which can carry out PCR on each sample individually, or a group of, or all of the plurality of samples simultaneously.